



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for Reissue of)	
Bunyan <i>et al.</i> , U.S. Patent No. 6,054,198)	Examiner D. L. Tarazano
)	
Application No. 09/714,680)	Group Art Unit 1773
)	
Filed: November 16, 2000)	
)	April 18, 2002
For: Conformal Thermal Interface Material)	
For Electronic Components)	Cleveland, Ohio 44124-4141

AET
#7/A

COMMISSIONER FOR PATENTS
WASHINGTON, DC 20231

AMENDMENT AND RESPONSE

Responsive to the Office Action mailed November 1, 2001, reconsideration the above-identified application respectfully is solicited on behalf of the Applicant.

IN THE CLAIMS

Please amend claim 1 as follows:

1. (Twice Amended) A method of conductively cooling a heat-generating electronic component having an operating temperature range above normal room temperature and a first heat transfer surface disposable in thermal adjacency with a second heat transfer surface of a thermal dissipation member to define an interface therebetween,
5 said method comprising the steps of:
 - (a) providing a thermally-conductive material which is form-stable at normal room temperature in a first phase and conformable in a flowable second phase to substantially fill said interface, said material having a transition temperature from said first phase to said second phase within the operating temperature range of said electronic
10 component, and said material consisting essentially of at least one resin or wax component or mixture thereof blended with at least one thermally-conductive filler;
 - (b) forming said material into a self-supporting and free-standing film layer, said layer consisting essentially of said material and having a thickness of from about 1-10 mils;
 - (c) applying said layer to one of said heat transfer surfaces;

RECEIVED
MAY 08 2002
TC 1700

- 15 (d) disposing said heat transfer surfaces in thermal adjacency to define said interface; and
- (e) energizing said electronic component effective to heat said layer to a temperature which is above said phase transition temperature.

Please amend claim 9 as follows:

9. (Twice Amended) A thermally-conductive interface for interposition between a heat-generating electronic component having an operating temperature range above normal room temperature and a first heat transfer surface disposable in thermal adjacency with a second heat transfer surface of a thermal dissipation member, said interface
- 5 comprising a self-supporting and free-standing film layer having a thickness of from about 1-10 mils and consisting essentially of a thermally-conductive material which is form-stable at normal room temperature in a first phase and substantially conformable in a flowable second phase to said interface surfaces, said material having a transition temperature from said first phase to said second phase within the operating temperature range of said
- 10 electronic component, and said material consisting essentially of at least one resin or wax component or mixture thereof blended with at least one thermally-conductive filler.